

Serial No.: 09/826,558

Attorney's Docket No.: 10559/422001/P10436

Amendment to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (currently amended) A method comprising:

transmitting packets over a network path from a source to a destination using Transmission Control Protocol (TCP) in which receipt of at least some of the packets from the source at a destination is acknowledged by the destination to the source,

the transmitting including a retransmission of the packets within a subpath of the network path; and

managing acknowledgments of the retransmission of the packets within the subpath by a mechanism that is independent of the acknowledging by the destination ~~source~~ to the source ~~destination~~ with respect to the transmitting of the packets over the network path.

2. (original) The method of claim 1 in which the network path includes an upper TCP layer.

3. (original) The method of claim 1 in which the subpath includes a base TCP layer.

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4. (original) The method of claim 1 in which the subpath extends between a gateway device and the source.

5. (original) The method of claim 1 in which the subpath extends between a gateway device and the destination.

6. (original) The method of claim 1 in which managing acknowledgments includes storing at the subpath a packet sent by the source to the destination for retransmission until the subpath receives an acknowledgment that the destination has received the packet.

7. (original) The method of claim 1 further comprising transmitting the packets within the subpath.

8. (currently amended) An article comprising:
a machine-readable medium which contains machine-executable instructions, the instructions causing a machine to:
transmit packets over a network path from a source to a destination using Transmission Control Protocol (TCP) in which receipt of at least some of the packets from the source at a destination is acknowledged by the destination to the source,
the transmitting including a retransmission of the packets within a subpath of the network path; and

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manage acknowledgments of the retransmission of the packets within the subpath by a mechanism that is independent of the acknowledging by the destination ~~source~~ to the source ~~destination~~ with respect to the transmitting of the packets over the network path.

9. (original) The article of claim 8 in which the network path includes an upper TCP layer.

10. (original) The article of claim 8 in which the subpath includes a base TCP layer.

11. (original) The article of claim 8 in which the subpath extends between a gateway device and the source.

12. (original) The article of claim 8 in which the subpath extends between a gateway device and the destination.

13. (original) The article of claim 8 in which managing acknowledgments includes storing at the subpath a packet sent by the source to the destination for retransmission until the subpath receives an acknowledgment that the destination has received the packet.

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14. (currently amended) An apparatus comprising:
a source configured to transmit packets over a network path to a destination using Transmission Control Protocol (TCP) in which receipt of at least some of the packets from the source at a destination is acknowledged by the destination to the source; and

a mechanism configured to retransmit packets within a subpath of the network path and to manage acknowledgments of the retransmission of the packets within the subpath independent of the acknowledging by the destination ~~source~~ to the source ~~destination~~ with respect to the transmitting of the units over the network path.

15. (original) The apparatus of claim 14 in which the network path includes an upper TCP layer.

16. (original) The apparatus of claim 14 in which the subpath includes a base TCP layer.

17. (original) The apparatus of claim 14 in which the subpath extends between two gateway devices.

18. (original) The apparatus of claim 14 in which the subpath extends between a gateway device and the destination.

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19. (original) The apparatus of claim 14 further comprising a storage mechanism accessible by the mechanism and configured to store a packet sent by the source to the destination for retransmission until the mechanism receives an acknowledgment that the destination has received the packet.

20. (original) A system comprising:

a first storage mechanism at a first side of a Transmission Control Protocol (TCP) network path configured to store packets sent from a source to a destination at a second side of the TCP network path;

a second storage mechanism at the first side configured to store acknowledgments of received packets sent from the second side; and

a mechanism configured to transmit packets stored in the first storage mechanism to the second side based on duplicity of acknowledgments included in the second storage mechanism.

21. (original) The system of claim 20 in which the TCP network path includes a base TCP layer.

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22. (original) The system of claim 20 in which the source is configured to transmit packets to the destination on a network path including the TCP network path.

23. (currently amended) A method comprising:
transmitting interrelated units of information over a network path from a source to a destination using a protocol in which receipt of at least some of the units from the source at a destination is acknowledged by the destination to the source,
the transmitting including a retransmission of the units within a subpath of the network path; and
managing acknowledgments of the retransmission of the units within the subpath by a mechanism that is independent of the acknowledging by the destination ~~source~~ to the source ~~destination~~ with respect to the transmitting of the units over the network path.

24. (original) The method of claim 23 in which the network path includes an upper layer of a Transmission Control Protocol.

25. (original) The method of claim 23 in which the subpath includes a base layer of a Transmission Control Protocol.

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26. (original) The method of claim 23 in which the protocol includes a Transmission Control Protocol.

27. (original) The method of claim 23 in which the subpath extends between a gateway device and the source.

28. (original) The method of claim 23 in which the subpath extends between a gateway device and the destination.

29. (original) The method of claim 23 in which managing acknowledgments includes storing at the subpath a packet sent by the source to the destination for retransmission until the subpath receives an acknowledgment that the destination has received the packet.